DOCUMENT RESUME

ED 257 825 SP 026 231

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TITLE Teacher Socialization as a Mechanism for Developing Student Motivation to Learn. Research Series No. 157.
INSTITUTION Michigan State Univ., East Lansing. Inst. for Research on Teaching.
SPONS AGENCY National Inst. of Education (ED), Washington, DC.
PUB DATE Feb 85
CONTRACT 400-81-0014
NOTE 48p.
PUB TYPE Information Analyses (070)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Classroom Techniques; Elementary Education; *Motivation Techniques; *Positive Reinforcement; Role Models; *Student Attitudes; Student Behavior; *Student Motivation; *Teacher Student Relationship

ABSTRACT

This paper describes conceptualization and research on student motivation to learn, which is treated as the ideal motivational state for students in classroom settings and defined as the tendency of students to engage in academic activities with the intention of trying to get the intended academic benefits (knowledge and skills). Student motivation to learn is differentiated from related concepts that do not appear to apply as well to the primarily cognitive (rather than physical skill) learning that occurs in the work setting of the classroom (rather than in recreational or other free choice settings). Research is reviewed showing that neither teachers nor students say much about the content or skills being learned or give other evidence to suggest that student motivation to learn is a major factor influencing behavior in typical classrooms. The paper concludes with description of programmatic research designed to change this situation, and offers guidelines about how teachers can use modeling, communicaton of expectations, and other socialization mechanisms to stimulate their students to develop and activate motivation to learn during everday academic activities. (Author)

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Research Series No. 157

TEACHER SOCIALIZATION AS A MECHANISM FOR DEVELOPING STUDENT MOTIVATION TO LEARN

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Published By

The Institute for Research on Teaching
252 Erickson Hall
Michigan State University
East Lansing, Michigan 48824-1034

February 1985

This work is sponsored in part by the Institute for Research on Teaching, College of Education, Michigan State University. The Institute for Research on Teaching is funded primarily by the Program for Teaching and Instruction of the National Institute of Education, United States Department of Education. The opinions expressed in this publication do not necessarily reflect the position, policy, or endorsement of the National Institute of Education. (Contract No. 400-81-0014)

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Abstract

This paper describes conceptualization and research on student motivation to learn, which is treated as the ideal motivational state for students in classroom settings and defined as the tendency of students to engage in academic activities with the intention of trying to get the intended academic benefits (knowledge and skills). Student motivation to learn is differentiated from related concepts that do not appear to apply as well to the primarily cognitive (rather than physical skill) learning that occurs in the work setting of the classroom (rather than in recreational or other free choice settings). Research is reviewed showing that neither teachers nor students say much about the content or skills being learned or give other evidence to suggest that student motivation to learn is a major factor influencing behavior in typical classrooms. The paper concludes with description of programmatic research designed to change this situation, and offers guidelines about how teachers can use modeling, communication of expectations, and other socialization mechanisms to stimulate their students to develop and activate motivation to learn during everyday academic activities.

TEACHER SOCIALIZATION AS A MECHANISM FOR DEVELOPING STUDENT MOTIVATION TO LEARN[1]

Jere Brophy and Neelam Kher[2]

Student motivation has been an enduring and popular topic in the psychology of education, and an impressive body of theory and research has accumulated on it. Much of this work has treated motivation as a predictor variable within the context of a focus on individual differences. That is, researchers gather measures of inferred mediating variables such as achievement motivation, self efficacy perceptions, or attributional tendencies and use them to predict individual differences in achievement-related behaviors such as task choice, persistence, goal setting, or degree of mastery achieved. Such research typically shows that variance in achievement-related behaviors is partly predictable from variance in pre-existing motivational patterns.

But where did these pre-existing motivational patterns come from? How can desirable motivational patterns be developed? Can teachers socialize students in ways that will enhance the motivational patterns the students bring into the classroom? These questions, which imply consideration of student motivation as a dependent variable, are of central concern in this paper. We will review theory and research bearing on the question of how a particular kind of motivation--called student motivation to learn--can be developed by teachers through modeling, communication of expectations, and other socialization mechanisms.

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[1]This paper is in press as a chapter in Robert Feldman (Ed.), Social psychology applied to education, to be published by the Cambridge University Press.

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Definition of Motivation to Learn

Our focus on student motivation to learn, rather than on motivation considered more generally, implies a restriction of purview in at least two senses. First, we will concentrate on learning within the typical classroom setting, with all that this implies. In particular, we assume that most student time will be spent on tasks imposed by the teacher rather than chosen by the students, and will be in a public setting where their performance will often be witnessed by peers, as well as monitored and graded by the teacher. Second, our focus is on student motivation to learn the knowledge and skills included in the formal curriculum. Specifically, we adopt the definition of student motivation to learn offered by Brophy (1983):

> We may conceptualize "student motivation to learn" as both a general trait and a situation-specific state. As a general trait, motivation to learn refers to an enduring disposition to value learning for its own sake--to enjoy the process and take pride in the outcomes of experiences involving knowledge acquisition or skill development. In specific situations, a state of motivation to learn exists when students engage themselves purposefully in classroom tasks by trying to master the concepts or skills involved. Students who are motivated to learn will not necessarily find classroom tasks intensely pleasurable or exciting, but they will take them seriously, find them meaningful and worthwhile, and try to get the intended benefit from them. (p.200)

Implied in this definition is a distinction between learning and performance: learning refers to the information processing, sense-making, and comprehension or mastery advances that occur during the acquisition of knowledge or skills; performance refers to the demonstration of such knowledge or skill after it has been acquired. Many approaches to the study of relationships between motivation and behavior have ignored this distinction or have been content to deal only with performance. Such approaches are inappropriate for studying student motivation to learn because of the heavily cognitive nature of classroom learning. With a few exceptions such as penmanship or zoology dissection skills, school learning is primarily covert and conceptual rather

than overt and behavioral. It is true that overt behaviors (verbal responses to questions, written responses to assignments) must be elicited in order to provide students with practice and application opportunities and to supply diagnosis and evaluation data to teachers, but such behaviors mostly involve performance (reproduction or application) based on learning that has already occurred. Obviously, both learning and performance are important, but our focus here is on learning and, in particular, on how student motivation to learn affects student cognition and information processing during activities designed to promote knowledge and skill acquisition.

Our approach fits within general social learning theory and, in particular, within *expectancy x value* theory which posits that people's effort expenditure on a particular task will be a product of (1) the value that they place on doing the task or reaping the benefits that it offers and (2) the degree to which they expect to be able to succeed if they apply themselves. This is the same general orientation shared by such approaches to motivation as those based on the concepts of achievement motivation, efficacy perceptions, and causal attributions. However, these formulations are concerned with the expectancy side of the *expectancy x value* equation. Our approach complements (rather than opposes) these approaches by concentrating on the value side of that equation (see Parsons & Goff, 1980 on this point). Thus we are not so much concerned with students' desire to achieve in the sense of competing with standards of excellence as we are concerned with students' desire to learn content and master skills. Similarly, we are not so much concerned with perceptions of efficacy (focused on the self) as with perceptions of comprehension (focused on the content), and not so much concerned with students' attributions about the causes of success or failure as with their attributions concerning their reasons for participating in academic activities.

Our approach also has much in common with those of Lepper (1981) and others who have written about intrinsic motivation. These approaches apply primarily to free choice or play settings, however, and concentrate on factors that make tasks attractive or unattractive to people. Their findings suggest that students' intrinsic motivation to engage in school tasks can be enhanced by developing more interesting and enjoyable tasks or by allowing students more free choice concerning what to do and how to do it. In addition, Lepper and Gilovich (1982) have shown that even imposed tasks can be presented in ways that generate interest and minimize concern about external evaluation and awareness of the fact that the tasks are not freely chosen.

We endorse these notions, but with two qualifications. First, teachers' opportunities for allowing genuine choices by students are limited. If they are to teach the formal curriculum, teachers will have to require attention to lessons and hold students accountable for completing assignments and mastering the content. Thus a major challenge for educators is to find ways to stimulate intrinsic motivation in students who must participate in compulsory activities in school, which is a work setting. Second, approaches to motivation that focus on intrinsic interest in tasks are concerned primarily with the affective aspects of motivation--how much students enjoy tasks. Although we agree that student enjoyment of tasks (within what is reasonable to expect) should be one of the teacher's goals, our approach focuses more on the cognitive aspects of motivation--students' perceptions of why they are engaged in the task and what they are supposed to get out of it.

Among recent contributions to the psychology of motivation in the classroom, our approach is closest to (and has been most directly informed by) the work of Berlyne (1967) on curiosity (cf. Keller, 1983, on classroom applications), Maehr (1976) on continuing motivation, Condry and Chambers (1978) on

qualitative aspects of task engagement as they relate to intrinsic motivation, Kruglanski (1978) on endogenous versus exogenous attribution of task engagement as it relates to performance, and Corno and Mandinach (1983) on qualitative aspects of students' cognitive engagement in classroom activities. Our key concepts are illustrated in Table 1.

As shown in the table, students' attitudes toward classroom tasks can be construed as lying on a continuum from negative through neutral to positive. They also can be classified as concerned with factors endogenous to the task (the processes involved in engaging in the task and the learning that it engenders) versus exogenous to the task (focused on the self rather than the task, or on anticipated consequences of task performance). Finally, students' attitudes can be classified as concerned either with the value they place on the task or their expectations for succeeding or being rewarded for performance. Our focus is on developing ways for teachers to stimulate student motivation that is positive in the direction of attitude (as described in the bottom sections of Table 1), especially motivation that can be described as task endogenous (described in the two bottom sections in the left half of Table 1).

Optimizing Student Motivation to Learn

The top sections of Table 1 describe negative attitudes and other undesirable aspects of student motivation. We take it as given that negative motivation of this sort, along with the factors that cause it, must be eliminated. One cannot reasonably expect to develop positive motivation in students who are burdened by negative attitudes, anxiety, or fear of failure. Thus we assume that necessary, but not sufficient, conditions for the development of positive task endogenous motivation to learn will include: (1) a patient,

Table 1

Qualitative Aspects of Students' Motivation Related to Specific Academic Tasks

Direction of Attitude	Task Endogenous Motivation		Task Exogenous Motivation	
	Task Value Focus	Performance Outcome Focus	Task Value Focus	Performance Outcome Focus
Negative	Affect: Anger or dread. Student dislikes the task, which is in effect a punishment. Cognition: Task focus is "invaded" by resentment, awareness of being coerced into unpleasant or pointless activity.	Affect: Anxiety, embarrassment, fear of failure. Cognition: Task focus is "invaded" by perception of confusion, failure, helplessness. Attribution of (poor) performance to insufficient ability.	Affect: Alienation, resistance. Student doesn't want to acquire this knowledge or skill. Cognition: Perceptions of conflict between what this task represents and one's self concept, sex-role identification, etc. Anticipation of undesirable consequences to involvement in such tasks.	Affect: Apathy, resignation, resentment. Cognition: Perception that one cannot "win," that one has no realistic chance to earn desired rewards, satisfactory grades, etc.
Neutral	Neutral attitude toward task; open minded (if new) or indifferent (if familiar).	No particular expectations; neither success nor failure are salient concerns.	Neutral. The knowledge or skills developed by the task elicit neither avoidance nor excitement.	No extrinsic consequences are expected; performance will neither be rewarded nor punished.
Positive	Affect: Enjoyment, pleasure. Engagement in this task is a reward in its own right. Cognition: Relaxed concentration on the processes involved in doing this task. "Flow." Metacognitive awareness of what the task requires and how one is responding to it. Focus on the academic content when learning, and on the quality of the product when performing.	Affect: Satisfaction (perhaps occasional excitement) as skills or insights develop. Pride in craftsmanship, successful performance. Cognition: Perception of progress toward goals, achieved with relative ease. Attribution of (successful) performance to (sufficient) ability plus (reasonable) effort. Focus on one's developing knowledge and skills.	Affect: Energized, eager to learn this knowledge or skill (for its instrumental value). Cognition: Recognition that the task is a subgoal related to attainment of important future goals (often as a "ticket" to social advancement). Focus on the "relevant" aspects of the learning.	Affect: Excitement, happy anticipation of reward. Cognition: Recognition that one can attain desired rewards with relative ease. Focus on meeting stated performance criteria.

encouraging teacher who supports students' learning efforts and does not engender anxiety through hypercritical or punitive treatment: (2) an appropriate match between student ability and task difficulty so that students can expect to succeed if they put forth reasonable effort, thus maximizing success experiences and efficacy perceptions, and minimizing tendencies toward learned helplessness and attribution of failure to lack of ability; (3) sufficient task quality and appropriateness (the tasks make sense as effective means for accomplishing worthwhile academic objectives); (4) sufficient task variety and interest value to minimize boredom due to sheer satiation; and (5) a generalized teacher tendency to present academic tasks as learning opportunities offered by a helpful instructor rather than as ordeals to be endured or hurdles to be cleared merely in order to please a demanding authority figure.

These conditions should be sufficient to set the stage for development of positive task endogenous motivation in most students, although there will be individual differences in attitudes toward different subject matter and types of task, and although a few alienated or deeply discouraged students will need intensive and individualized remedial treatment. Even if totally successful, however, elimination of negative motivation will merely create a state of neutrality (see the middle sections of Table 1). Given the realities of classroom life, a neutral stance toward classroom tasks is in effect a slightly negative motivational posture. That is, if students simply do not care about the processes or outcomes involved in academic tasks, there is no positive motivation to counteract the probable negative motivation associated with the facts that school tasks involve effort (they are work, not play), are done under accountability pressure, and will be graded. If teachers want more than a minimal level and quality of task engagement, they will have to take actions designed to motivate their students.

Teachers are often advised to use task exogenous motivational strategies (lower right-hand sections or Table 1) for this purpose. Task exogenous strategies that focus on task value involve attempts to develop enthusiasm for the task by making it meaningful or important to the students or by showing them that they will need the knowledge or skills that the task develops in order to succeed in life. Task exogenous approaches that focus on performance outcomes involve offering rewards for success. These task exogenous approaches can be effective in improving student task performance, although they will not develop task endogenous motivation to learn except perhaps indirectly, if they induce self efficacy perceptions and these perceptions lead to increased interest in similar tasks. Furthermore, if used inappropriately, task exogenous approaches can undermine intrinsic motivation and produce a suboptimal quality of performance in which students are more concerned about maximizing rewards while expending minimal effort than about mastering the knowledge or skills being taught (Condry & Chambers, 1978). Fortunately, research has shown that these undesirable effects of rewards can be minimized by tying reward delivery to quality rather than mere quantity of performance, and by seeing that the task itself, and not just the expected reward, is salient to the students. Guidelines for doing this are given in Table 2. These guidelines are phrased with respect to delivery of verbal praise, but the same principles would also apply to delivery of other types of reward.

We believe that student motivation to learn is optimized when it has the qualities associated with positive task endogenous motivation (the lower sections in the left-hand side of Table 1). That is, students value (enjoy, or at least find meaningful and worthwhile) the processes involved in learning content, value mastery of the content itself, and exhibit pride in craftsmanship while performing practice or application tasks. During such performance,

Table 2

Guidelines for Effective Praise

EFFECTIVE PRAISE	INEFFECTIVE PRAISE
1. is delivered contingently.	1. is delivered randomly or unsystematically.
2. specifies the particulars of the accomplishment.	2. is restricted to global positive reactions.
3. shows spontaneity, variety, and other signs of credibility; it suggests clear attention to the student's accomplishment.	3. shows a bland uniformity that suggests a conditioned response made with minimal attention to the student's accomplishment.
4. rewards attainment of specified performance criteria (which can include effort criteria, however).	4. rewards mere participation, without consideration of performance processes or outcomes.
5. provides information to students about their competence or the value of their accomplishments.	5. provides no information at all or gives students information about their status.
6. orients students toward better appreciation of their own task-related behavior and thinking about problem solving.	6. orients students toward comparing themselves with others and thinking about competing.
7. uses students' own prior accomplishments as the context for describing present accomplishments.	7. uses the accomplishments of peers as the context for describing students' present accomplishments.
8. is given in recognition of noteworthy effort or success at difficult (for this student) tasks.	8. is given without regard to the effort expended or the meaning of the accomplishment.
9. attributes success to effort and ability, implying that similar successes can be expected in the future.	9. attributes success to ability alone or to external factors such as luck or ease of task.
10. fosters endogenous attributions. Students believe that they expend effort on the task because they enjoy the task and/or want to develop task-relevant skills.	10. fosters exogenous attributions. Students believe that they expend effort on the task for external reasons--to please the teacher, win a competition or reward, or the like.
11. focuses students' attention on their own task relevant behavior.	11. focuses students' attention on the teacher as an external authority figure who is manipulating them.
12. fosters appreciation of, and desirable attributions about, task-relevant behavior after the process is completed.	12. intrudes into the ongoing process, distracting attention from task-relevant behavior.

Note: From "Teacher Praise: A Functional Analysis" by J. Brophy (1981), Review of Educational Research, 51, pp. 5-32. Copyright 1981 by the American Educational Research Association, Washington, D.C. Reprinted with permission.

their focus is on the processes involved in working with the content or performing the skill and not on themselves, their abilities, how their progress will be perceived by others, or issues of success versus failure or reward versus punishment, although such concerns may surface before or after performance. In short, they will be absorbed in the task to the extent of experiencing a state of "flow" as described by Csikszentmihalyi (1975). During "flow" experiences, people experience direct, immmediate rewards from engaging in the processes involved in activities: Sense of control, clear perception of feedback, merging of thought and awareness, loss of self consciousness, and a feeling of enjoyment. These experiences usually occur during self-chosen recreational activities, but Graef, Csikszentmihalyi, and Giannino (1981) have shown that many people experience them at work or in other settings in which they are engaged in compulsory activities. Furthermore, they report that the explanation for "flow" experiences lies less in the attributes of tasks than in the tendencies of individuals to generate such experiences for themselves in various tasks and situations. In other words, the tendency to experience "flow" appears to act as a trait variable, developed to different degrees in different individuals through experience (and presumably, socialization).

Diener and Dweck's (1978) studies of "mastery oriented" and "helpless" students provide another glimpse of this optimal level of task endogenous motivation to learn. Helpless students gave up easily when they encountered frustration, attributing their problems to lack of ability. Their task persistence was impaired by distracting thoughts of hopelessness, despair, and negative self-evaluation, as well as negative affect (anxiety, anticipation of failure). In contrast, mastery oriented students concentrated on the problem rather than on themselves or the quality of their performance. When they encountered difficulties they intensified their efforts and sought to diagnose

the source of their confusion, but they did not become upset or conclude that the task was too hard. When things were progressing smoothly, they concentrated on just doing the task. They neither told themselves that they were stupid or that the task was too hard when they had problems nor told themselves that they were bright or that the task was easy when they learned without difficulty. This suggests that although attribution retraining programs may be needed as remedial treatment for helpless students, such training will not by itself engender task endogenous student motivation to learn. Presumably, development of the latter will require modeling and specific instruction in task endogenous attitudes and related cognitive skills (learning sets, information processing and problem solving skills, self monitoring of comprehension and other metacognitive awareness skills). That is, one must have not only the intention to learn, but the skills for doing so effectively. Thus the task endogenous aspects of student motivation to learn lie at the juncture of motivation and learning/instruction.

Little Evidence of Motivation to Learn in Most Classrooms

If task endogenous student motivation to learn is optimal, what is the incidence of such motivation in typical classrooms? This question has not been investigated systematically, but what data do exist are not encouraging.

Anderson and her colleagues (Anderson, 1981; Anderson, Brubaker, Alleman-Brooks, & Duffy, 1984) observed first-grade students working on seatwork assignments and then interviewed them about what they had done, why they did it, and how they did it. Their data indicated that many students (especially low achievers) did not understand how to do their assignments. Rather than ask the teacher or get help in other ways, however, they were content to respond randomly or to rely on response sets that had nothing to do with the content supposedly being learned (alternating or geometrical patterns for

circling multiple choice answers; picking one from a list of new words to fill the blank in a sentence without reading the sentence itself). Low achievers tended to be more concerned about completing assignments than about understanding the content. As one student said to himself as he finished a work sheet, "I don't know what it means, but I did it." (Anderson et al., 1984, p. 20).

High achievers completed most assignments successfully and showed less concern about getting finished on time, but even they gave little evidence of understanding the content-related purposes of the assignments. No student consistently explained assignments in terms of their specific content. Most responses were vague generalities (e.g., "It's just our work." or "We learn to read."). In general, seatwork assignments were virtually meaningless rituals for many of the low achievers in these first-grade classes, and even the high achievers seemed only dimly aware of the purposes of assignments or the skills they were practicing as they carried them out.

Analysis of the teachers' presentations of assignments to the students suggested that a major reason for the students' low quality of engagement in assignments was teacher failure to call attention to their purposes and meanings. Most presentations included procedural directions or special hints (e.g., pay attention to the underlined words), but only five percent explicitly described the purpose of the assignment in terms of the content being taught, and only 1.5 percent included explicit descriptions of the cognitive strategies to be used when doing the assignment.

Rohrkemper and Bershon (1984) interviewed elementary-school students about what was on their minds when they worked on assignments. They found that of 49 students who gave codable responses, 2 were concerned only about getting finished, 45 were concerned about getting correct answers, and only 2

mentioned trying to understand what was being taught. Corno and Mandinach (1983) and Blumenfeld, Hamilton, Wessels, and Meece (1983) have also expressed concern about the low quality of students' engagement in classroom tasks. Doyle (1983) suggests that most students are preoccupied with maximizing their ability to predict and, if possible control, the relationship between their academic performance and the grades they will receive. In particular, he suggests, students will seek to avoid tasks that involve ambiguity (about precisely what will be needed to earn high grades) or risk (high difficulty level or strict grading standards), and thus will avoid asking questions or seeking to probe deeper into the content because they want to stick with safe, familiar routines.

In summary, available data concerning students' thinking about classroom tasks reveal little evidence of motivation to learn. Also, it appears that neither teachers nor students typically reveal much awareness of the purpose of activities, and that concern about grades may suppress whatever motivation students may have to learn about the subject matter.

Developing Student Motivation to Learn

These conclusions from classroom research are supported by research on intrinsic motivation that also indicates that such motivation is diminished when task performance is monitored by authority figures, evaluated, or results in reward or punishment (Lepper, 1981). Thus the prospects for stimulating motivation to learn in the work setting of the classroom appear dim. However, even if the grading system and the teacher's role as an authority figure do counteract efforts to develop student motivation to learn, such effects should be a matter of degree. Motivation to learn might not be in evidence in the classes of authoritarian teachers who make tests salient and threatening, but considerable evidence of such motivation might appear in the

classes of supportive teachers who attempt to develop it and who follow the guidelines summmarized in Table 2.

Also, it appears that most teachers could do a great deal more than they do now to develop student motivation to learn. The findings of Anderson et al. (1984) on teachers' failure to call students' attention to the purposes of activities certainly suggest this. So do similar findings by Roehler, Duffy, and Meloth (in press), who studied reading instruction at the fifth-grade level. Here again, teachers typically failed to call attention to the purposes of assignments, and students failed to mention learning of specific content when asked what they were doing and why. Following up on these findings, Roehler et al. trained teachers to provide more detailed explanations of content and, in particular, to make sure that they called their student's attention to the purposes of academic activities. Data from this follow-up study revealed that the students of the trained teachers showed significant increases in awareness of the purposes of activities, and more generally, in metacognitive awareness of their own information processing and learning progress when working on assignments.

Such data provide cause for optimism. Perhaps we did not see much motivation to learn in classrooms because teachers typically fail to do much to develop such motivation. We have been conducting a series of studies designed to explore this possibility.

Teachers' Task Introductions and Students' Task Engagement

We began with a motivational application of recent theorizing about the self-fulfilling prophecy effects of teachers' expectations. Although the teacher expectation literature has concentrated on student achievement as the outcome of interest, it is theoretically possible for teachers' expectations to have self-fulfilling prophecy effects on a great range of outcomes. As

Good and Brophy (1984) have pointed out, the success of teachers' classroom management efforts is probably determined in part by expectations communicated about student conduct; classroom atmosphere probably depends in part on expectations communicated about student cooperation and interpersonal relationships; and student responsiveness to academic activities probably depends in part on expectations communicated about the meaningfulness, interest potential, or practical value of those activities. Following up on the latter hypothesis, our first study (Brophy, Rohrkemper, Rashid, & Goldberger, 1983) was designed to test for predictable relationships between the comments that teachers made about classroom tasks while introducing them to their students and the subsequent motivation displayed by the students as they worked on the tasks (as inferred from task engagement ratings made by classroom observers). Data were collected in six intermediate grades (4-6) classrooms observed 8-15 times during reading and mathematics periods. The classes were all taught by experienced teachers working in a school serving a racially mixed, working-class population in a small midwestern city.

Each reading or mathematics period involved one or more (usually two to four) different tasks. Observers noted verbatim records of what the teachers said about each task when introducing it and then rated apparent student task engagement five minutes after the task began and again 10 minutes later (if the task was still going on). These were purely naturalistic data: Teachers knew that we were interested in student motivation but did not know what data were being recorded, and their only instructions were to teach as they normally would.

The relative frequencies of various task presentation statements made by the teachers are shown in Table 3, classified according to the concepts illustrated in Table 1. The data in Table 3 indicate that teachers' task introductions were spread across many different categories rather than concentrated in

Table 3

Classifications of 317 Task Presentation Statements
Made by Six Elementary School Teachers

	Statements	N	%
Task Endogenous	**Value-Focused**		
	Apology (teacher apologizes to the students for foisting this task on them).	1	<1
	Cues negative expectation (teacher indicates directly that the students are not expected to like the task or do well on it).	25	8
	Cues positive expectation (teacher states directly that the students are expected to enjoy the task or do well on it).	52	16
	Self-actualization value (teacher suggests that students can develop knowledge or skill that will bring pleasure or personal satisfaction).	0	0
	Teacher enthusiasm (teacher directly expresses his or her own liking for this type of task).	8	3
	Performance-Expectation		
	Positive challenge/goal setting (teacher sets some goal or challenges the class to try to attain a certain standard of excellence).	18	6
Task Exogenous	**Value-Focused**		
	Embarrassment (teacher tries to show the importance of the task to the students, but does this in a negative way, indicating that they are likely to be embarrassed at some time in the future if they do not learn the skills involved).	1	<1
	Survival value (teacher points out that students will need to learn these skills to get along in life or to function in society).	13	4
	Personal relevance--other (teacher makes some other kind of statement that tries to tie the task to the personal lives or interests of the students).	10	3
	Teacher personalizes (teacher expresses personal beliefs or attitudes directly or tells the students about personal experiences that illustrate the importance of this task).	3	1
	Performance-Expectation		
	Threats/punishment (teacher threatens negative consequences for poor performance).	12	4
	Accountability (teacher reminds students that the work will be carefully checked or that they will be tested on the material soon).	18	6
	Recognition (teacher promises that students who do well on the task will be recognized with symbolic rewards like, for example, hanging up of good papers in the classroom).	7	2
	Extrinsic reward (teacher promises reward for good performance).	2	1

Table 3 (continued)

Classifications of 317 Task Presentation Statements
Made by Six Elementary School Teachers

	Statements	N	%
Other (unclassified)	**Other (Unclassified) Statements**		
	Time reminder (teacher reminds students that they only have limited time to get the assignment done so they had better concentrate).	19	6
	Cues effort (teacher urges students to work hard).	31	10
	Continuity (teacher notes relationship between this task and previous work students have done, especially recently).	29	9
	None (teacher launches directly into the task with no introduction).	68	21
	Totals	317	100

Note: Based on data presented in Brophy (1982).

just one or two. The most frequently coded category was "none" (the bottom row in Table 3), indicating that the teacher launched directly into the task without taking time to make general comments about it or to try to develop student motivation to engage in it. When the teachers did make such general task descriptions or motivational attempts, their comments were coded into one or more of the other 17 categories (multiple coding occurred when teachers' task introductions included concepts that fit two or more categories). The motivationally relevant task introductions observed most frequently were cuing positive expectations (stating that the students probably would enjoy the task or do well on it), cuing effort (urging the students to work hard), noting the continuity between this task and previous tasks, and cuing negative expectations (stating that the students would probably not enjoy the task or not do well on it). The only category never used even once was the category for task endogenous, value-focused motivation: None of the six teachers ever mentioned that a task might have self-actualization value or present opportunities for students to experience pleasure or personal satisfaction through development of knowledge or skills.

Brophy et al. (1983) further analyzed data from the 165 tasks that had been coded both for teachers' introductory statements and students' task engagement. These data indicated that teachers made no introductory statement at all for 49 (30%) of the 165 tasks. Their presentation statements for the remaining 116 tasks yielded 206 codes, or almost two per task. So, although teachers jumped directly into tasks without giving a general introduction or motivational attempt 30% of the time, the introductions that they gave the other 70% of the time were lengthy and substantial enough to include, on the average, mention of two separate considerations likely to affect student motivation.

There was considerable individual variation across the six teachers. One launched directly into tasks without giving any introduction only 5% of the time, while two others did this 46% and 40% of the time respectively. One teacher was responsible for most of the "time reminder" and "positive challenge/goal setting" codes, and several other codes were used primarily with just two or three teachers. Task introductions were primarily positive (offering reward or recognition opportunities, expressing enthusiasm, or trying to develop positive expectations) for two teachers, neutral (time reminder, continuity, or cuing effort) for three others, and negative (accountability reminders, cuing negative expectation) for one teacher.

Within each of the six data sets (one for each teacher), scores based on the teacher's introductions to tasks (presence/absence scores for the categories shown in Table 3) were correlated with scores representing the level of student engagement in those tasks (recorded by the classroom observer). As expected, student engagement was relatively poor on tasks that had been introduced in ways classified as likely to have negative effects on student motivation (e.g., threatening punishment for poor performance, cuing negative expectations about the task). However, there was no parallel tendency for student engagement to be relatively high following task introductions expected to have positive effects on motivation (e.g., offering reward or recognition opportunities, cuing positive expectations about the task). Instead, student engagement tended to be highest on tasks that the teacher launched into directly without making introductory statements codable in any of our categories. Thus, although negative task introductions were associated with low task engagement, positive task introductions were not associated with high task engagement.

In general, there was little support for the notion that teachers' task introductions might have positive effects on student engagement. The correlations for the "None" category (launching directly into the task) showed positive relationships with engagement in three classes, no significant relationship for two classes, and a negative relationship in one class. It was true for only one class that task engagement was higher when the teacher said something intended to motivate the students than when the teacher said nothing at all. Furthermore, only 14 of a possible 52 relationships reached statistical significance for the other 17 task introduction categories, and 12 of these 14 were negative relationships. In other words, most relationships indicated lower student engagement when teachers made some codable introductory statement than when they did not.

Many of these negative relationships were expected, because they occurred for task introduction categories we had classified as likely to have negative effects on student motivation (threatening punishment, reminding the students of accountability pressures, and cuing negative expectations about the task). Also, the "personal reference--other" category, which we had classified as likely to have positive effects on student motivation, did show one positive correlation with student engagement (and no negative correlations). However, negative correlations were sometimes observed, and positive correlations were never observed, for task introductions we had classified as likely to have positive effects on student motivation (survival value, teacher enthusiasm), as well as for one of the categories that we had classified as neutral (challenge/goal setting).

In thinking about follow ups to these findings, we have concentrated on two aspects. First, it is possible that some of our classifications of task introductions as positive, neutral, and negative with respect to their probable effects on student motivation were incorrect. For example, we classified

teachers' communication of their own enthusiasm about tasks as likely to have positive effects, on the assumption that students will generally take their teachers' statements at face value. However, it may be that such communications of teacher enthusiasm should be classified as neutral (if students tend not to identify with their teachers and thus are not likely to infer that they will enjoy tasks merely because the teacher does) or even as negative (if students are alienated from their teachers or predisposed to believe that teachers' preferences are contradictory to, rather than merely different from, their own preferences). Time reminders provide another example. We classified such reminders as neutral, reasoning that they carry no information about the nature of the task itself or about possible consequences of task performance. However, it is possible that students regard such time reminders either positively (because they perceive them as well-intended attempts to provide helpful information) or negatively (because they are perceived as nagging or criticism, or merely because they remind the students that the task is imposed externally and their performance will be evaluated). Such ambiguities, combined with the surprising correlational findings for some of the categories, pointed to the need for information from students themselves on their reactions to teachers' task introductions.

A second focus for follow up was the lack of much support for our expectation that positive task introductions would maximize student engagement. Among several possible explanations for this (to be discussed in a later section), one that intrigued us and seemed to call for immmediate follow up was suggested by the teachers themselves during debriefing interviews. When asked why task engagement might have been higher when no introductory statements were made at all than when such statements were made, several teachers indicated that perhaps they tended to launch directly into tasks when things were

going smoothly and to take time to try to generate motivation only, or at least primarily, when they expected trouble because the class was becoming restive or because prior experiences with the task had gone poorly. If teachers do in fact have such tendencies, and if students should become aware of them, the students would have reason to discount or even react negatively to task introductions intended to stimulate motivation. A dissertation study by Kher (1984) was designed to discover whether in fact students are predisposed to discount or react negatively to teachers' motivation attempts.

Students' Reported Responses to Teachers' Task Introduction Statements

Kher (1984) interviewed 32 second graders, 32 fourth graders, and 32 sixth graders, mostly from the same working-class school within which the Brophy et al. (1983) data had been collected (two years earlier). Half of the students interviewed at each grade level were male and half were female. Within sex, half were high achievers and half were low achievers. The students were interviewed individually about how they would respond to various ways in which their teachers might introduce a hypothetical seatwork assignment in mathematics, referred to as a "math assignment." This general reference to a math assignment was used in preference to showing a specific assignment or, more probably, a different specific assignment for each grade level, because math seatwork assignments were familiar to all of the students and because we wanted to focus student attention on statements that teachers might make when introducing assignments rather than on the assignments themselves.

Pilot work indicated that students had difficulty responding to open-ended questions about the general topic of teacher task introductions (e.g., "What might your teacher say about a math assignment when presenting it to you?") or about particular task introductions considered individually (e.g., "What goes through your mind when you hear the teacher say 'I like

these kinds of problems and I think you will enjoy them too'?"). However, the students could respond adequately when questioned using a paired comparison format in which they were presented with two sample introduction statements and asked to choose which statement they would prefer their teacher to make when introducing the hypothetical math assignment and then to explain why they preferred that statement over the other. Consequently, the interviews began with a series of 17 of these paired comparison questions, using pairs of introduction statements selected from the set shown in Table 4.

The statements shown in Table 4 were selected for use in the Kher (1984) study because they were typical of the statements observed in the Brophy et al. (1983) study, with two exceptions. First, because our primary interest was in students' responses to teachers' positive task introduction statements, 8 of the 12 statements used (the first 8 shown in the table) were selected from among those classified as positive in the previous study. Second, the statements were kept short and phrased in simple words, in order to maximize clarity and minimize the memory demands made on the students.

The 8 positive items were always paired with other positive items (using a design that insured that each item was paired with each other item an equal number of times). The last 4 items in Table 4 had been classified as neutral or negative in the previous study. These items were paired only with one another or (in the case of the neutral items) with selected positive items. This paired comparison format yielded data on the relative popularity of the items, but it should be kept in mind that its primary purpose was to elicit students' free response descriptions of their thoughts and feelings following teachers' task introduction statements.

Once the students had completed the paired comparison items and were accustomed to talking about their thoughts and feelings in regard to teachers'

Table 4

Teacher Statements Used in Paired Comparisons

1. It's important that you know these skills. You'll need them for math next year.

2. I like these kinds of problems and I think you will enjoy them too.

3. Page 37 should be no trouble at all but the ones on page 39 are harder. You'll have to think before you do them.

4. If you do a really good paper, I will put it up on the bulletin board.

5. It's important that you know these skills. You'll need them when you go grocery shopping or to the bank.

6. If you do a really good paper, then later on I'll let you play some games.

7. Some of these problems are really tricky. I like tricky problems because they make me think hard, but then I really feel good when I get them right.

8. I never knew how important these skills were when I was your age but I found out when I started writing checks and had to take care of my money.

9. Problems like these will be on your next test, so work carefully.

10. You have only 20 minutes to finish, so work quickly.

11. If you don't get at least 10 of them right, you'll have to do another page.

12. Let's see how many of you can get them all right.

task presentation statements, they were asked two open-ended questions. The first was designed to elicit their beliefs about what it means when teachers launch directly into tasks without making introductory statements ("When would your teacher say 'Do the problems on pages 37 and 39' and nothing more?"). The second question was designed to identify the task introductions that would be most motivating to the students ("What kinds of things could your teacher say when giving assignments that would make you feel like working really hard in math?").

The students' responses to all questions were tape recorded, transcribed, coded, and then analyzed for general trends as well as for main effects or interactions involving grade level, gender, or achievement status.

The data revealed no significant tendency for students to discount or negatively interpret their teachers' motivation attempts. Only one student (a low achieving sixth-grade boy) responded negatively to our hypothetical task introductions. This boy stated: "You feel like the teacher is just pressuring you and pressuring you and telling you that page 37 is easy but 39 is hard; so you feel like you want to just cry, that you have to do harder and harder work." Later, he stated: "He's acting like he's just your owner and can boss you around anywhere." All of the other students accepted the teacher statements at face value and treated them as well intended attempts to provide useful information or to help make schooling a positive experience. Even the one disgruntled student, although he was unhappy about having to work hard and resented the teacher's position of authority over him, accepted the teacher's comments at face value in that he never suggested that the teacher might be lying or attempting to con him. Nor did he or any of the other 95 students ever suggest that teacher attempts to motivate students are clues that tasks will be frustrating or unpleasant. No one ever said anything such as, "When

she tells you you're going to like it, watch out?" or "If it really was going to be something you'd like, he wouldn't be telling you all this."

Similar findings were seen in the students' responses to questions about when teachers might fail to give task introductions. These responses made it clear that the students considered task introductions to be normal and helpful, or at least well intended. No student ever suggested that teachers would omit task introductions because certain tasks were so obviously enjoyable that they needed no hype. Instead, the reasons commonly offered for omission of task introductions were that the assignment was a review task with which the students were already familiar, the teacher was upset because the class was noisy and inattentive, or the teacher was busy or in a hurry. In general, then, the data provide no evidence that the students saw teachers as launching directly into enjoyable tasks but taking time to try to generate motivation for boring or frustrating tasks. Instead, we were encouraged to find, the students appeared to accept teachers' task introductions at face value and perceive them as intended to be informative and helpful. Some students, however did say that teachers do not really know what students like or that just because a teacher likes something does not mean that students will like it too.

Other data from this study are less encouraging. The students' preferences among the eight positive statements that were systematically paired with one another (Statements 1-8 in Table 4) suggest mixed signals with respect to student receptivity to developing motivation to learn. Statement 1 (It's important that you know these skills. You'll need them for math next year.) was the most popular, being selected over the alternative 68% of the time. This sounds promising, because it suggests student interest in the skills themselves rather than merely in obtaining rewards for mastering the skills.

However, the least popular alternative, selected only 38% of the time, was Statement 8 (I never knew how important these skills were when I was your age, but I found out when I started writing checks and had to take care of my money.). Furthermore, Statement 5 (It's important that you know these skills. You'll need them when you go grocery shopping or to the bank.) was preferred only 41% of the time. Thus, student preference for Statement 1 cannot be attributed to student motivation to learn the skills as such. Instead, Statement 1 apparently was a popular choice because it provides students with information that will help them to succeed in school. Student interest in school success is also implied by the next most popular statement, preferred 58% of the time, Statement 4 (If you do a really good paper, I will put it up on the bulletin board.).

The reasons that the students offered when explaining their paired comparison preferences also seem promising at first. The most frequently mentioned reasons were that the skills to be learned would be useful in the future, that it was important to learn or do hard problems, and that the student would feel proud about doing good work. Motivation to learn the content and pride in craftsmanship were mentioned more frequently than seeking to be rewarded for success or to avoid negative consequences for failure, appreciating the advance warnings contained in reminders about tests or deadlines, getting peer recognition through good work, or hoping that mastery of the task would make math easier to do in the future. Unfortunately, however, the majority of these statements about enjoying learning or taking pride in craftsmanship appeared to have been induced by the content of our items. Mention of enjoying working on problems, for example, occurred only in explanations for choices involving Statement 2 (I like these kinds of problems and I think you will enjoy them too.). More generally, the students' explanations of their paired

comparison choices appeared to be paraphrasings of the language used in our questions rather than credible statements of the students' own thinking expressed in their own words. Thus it was not surprising that somewhat different results were observed in the students' responses to our open-ended questions about what teachers could say or do to make them want to work hard on a math assignment.

By far the most popular element in these free-response answers, mentioned by about two-thirds of the students, was the suggestion that the teacher could motivate them to work hard by offering rewards. Other popular responses were threatening punishment for poor performance or challenging the students to meet stated goals (each mentioned by about one-third of the students), and communicating the importance of the task, making a personal appeal to the students to work hard, or giving them easy work (each mentioned by about 15% of the students). Here, the emphasis is on issues of reward versus punishment or success versus failure, with much less emphasis on the importance of the task and virtually no mention of motivation to learn the content or to take pride in craftsmanship.

There were few sex differences in these analyses, and those that did appear did not fall into general patterns. There also were few achievement-level differences, but those that did appear bore out expectations based on previous research. High achievers responded more positively than low achievers to challenges and mention of tricky problems, and low achievers responded more positively to opportunities to gain recognition by peers, teachers, or parents. In general, high achievers were more concerned with the task itself and whether they would enjoy or learn something from it, whereas low achievers were more concerned with getting support from the teacher and with obtaining rewards or avoiding punishments for their performances.

Grade-level differences were more frequent and sizeable than sex or achievement-level differences. In the paired comparison data, second and fourth graders were more likely than sixth graders to prefer Statements 4 and 6 (promising that good performance would be rewarded by hanging papers on the bulletin board or letting the students play games), but sixth graders were more likely to prefer Statement 1 (telling the students that the skills would be needed for math next year). Younger students were more concerned with the consequences of performance, and older students more concerned with the task itself. The second graders' rationales for their preferences were generally the most global and expressed in affective terms (liking enjoyable problems or playing games). The second graders were not especially concerned with the relevance of the content or its practical utility in the future. Their responses generally had a positive, upbeat tone, with emphasis on enjoying academic activities, taking pride in doing good work, and looking forward to being rewarded for success (but without much mention of the specific content of the work).

The fourth graders showed more concern than the second graders about the relevance and practical utility of the work, but they expressed similar enthusiasm about enjoyment of games and about being rewarded for good work. Furthermore, they differed from both the second graders and the sixth graders in being especially concerned about getting easy work. Even more than getting rewarded for success, the fourth graders were concerned about avoiding failure and its negative consequences.

The sixth graders were the most likely to mention concern about the importance of the learning and its future application, although they were more concerned about future application in school than in life outside of school (possibly because their teachers often mentioned the need to get them ready

for junior high school). The sixth graders were also the most likely to express appreciation for warnings about the importance of learning particular material (because it will be needed next year or will appear on a test). They were the least likely to mention rewards or the opportunity to play games. In general, second graders were most likely to mention enjoying the work and anticipating being rewarded for completing it successfully, fourth graders were most likely to mention fear of failure and concern about getting easy work, and sixth graders were most likely to mention needing information about what was important to learn so that they could adjust their study strategies.

Grade level differences in the students' free responses to our final question paralleled the trends seen in their paired comparison choices, except that the sixth graders mentioned that teachers could present the task as enjoyable or offer rewards for success in addition to pointing out the importance of learning the material.

Taken together, the data from the Kher (1984) study provide mixed messages concerning the potential of teacher socialization as a mechanism for developing student motivation to learn in classrooms. Positive indicators include the fact that students appear to accept what their teachers tell them about tasks at face value and to consider such statements as well intended and likely to be helpful. Thus there is no reason to fear that students will discount or question the motives behind teacher socialization attempts. However, the data also indicate that students are preoccupied with enjoying themselves (particularly the younger students) or with what Becker, Geer, and Hughes (1968) call the exchange of performance for grades (especially the older students), and not with motivation to learn. Interest in learning the content and pride in mastering skills are mentioned only secondarily if at all. This is not surprising in view of the failure of the teachers studied by Brophy et

al. (1983) to mention these potential outcomes of student task engagement, and it suggests that intensive and systematic intervention may be necessary to induce meaningful change.

The Kher (1984) findings also may explain why most of the "positive" task introductions observed in the Brophy et al. (1983) study appeared to be ineffectual or counterproductive. For example, in the earlier study, teachers frequently communicated positive expectations that the task would be easy or enjoyable. However, the students interviewed in the Kher study rarely mentioned enjoying academic tasks, and when they did, it was probably because they had been cued by one of our stimulus statements. Similarly, except for some of the fourth graders, informing students that a task would be easy did not appear likely to boost their motivation. In general, the students reported more enthusiasm when told that a task would be important or challenging than when told that it would be easy.

Other teacher motivation attempts commonly observed in the previous study included teachers' expressing personal enthusiasm for tasks or relating the knowledge and skills being taught to successful coping with life outside of school. However, the students interviewed in the Kher study were not enthused by such teacher statements. Most of the "positive" task introduction statements observed in the earlier study were among the types that did not yield strong positive reactions from the students interviewed in the Kher study, and most of the statements that received positive response from the students in the Kher study (offering rewards for good performance or communicating the importance of the task for future school success) were rarely used by the teachers in the earlier study. It appears there is a poor match between the incentives stressed by teachers when attempting to motivate their students and the incentives preferred by the students.

The Kher (1984) data also confirm our suspicions that some of our classifications of task introduction statements as positive, neutral, or negative would have to be revised, although in many cases the Kher data deepen rather than resolve the mysteries raised by the earlier data. For example, accountability statements (reminding students that material is going to be graded or tested) were classified as negative and did have a negative correlation with student engagement in the earlier study, but the students interviewed in the Kher study responded generally positively to such accountability statements. Rather than perceive them as threats, the students perceived them as well-intended and helpful hints about how to organize their study time. The differences in student response may be linked to differences in the actual wording. The accountability statement used in the Kher study ("Problems like these will be on your next test, so work carefully.") was neutrally worded and could easily be appreciated as a friendly tip from the teacher. However, inspection of the wording of statements coded in the accountability category in the previous study suggests that many of these were in fact threats rather than friendly reminders.

The time reminder category produced mixed results in the previous study (one positive correlation and two negative correlations with student engagement). However, the students interviewed in the Kher study responded very negatively to the time reminder item (Statement 10 in Table 4). When explaining these negative reactions, the students usually said that they hated to be rushed and resented being put in a position where they might have to turn in an incomplete paper or a paper that represented something less than their best work. Inspection of the data from the earlier study cleared up the mystery here. The two teachers in whose classes we observed negative correlations between time reminders and student engagement both gave time reminders similar

to the one used in the Kher study: namely, time reminders geared to the immediate present, suggesting that the students were running out of time to finish the assignment they were working on at the moment. In contrast, the teacher in whose classroom we observed a positive correlation between time reminders and student engagement used a different kind of time reminder. His time reminders were geared to the week or unit rather than the immediate present and provided helpful information that the students could use in planning their study time. He would, for example, remind the students on Tuesday that a series of workbook assignments was due on Friday.

The data on challenge/goal setting statements by teachers continue to be confusing. We originally classified such statements as neutral. However, this category produced three negative correlations and no positive correlations with student engagement in the earlier study, suggesting that such challenge or goal-setting statements should be classified as likely to have negative effects on student motivation. Yet, comments on challenge statements by students in the Kher study implied that such statements are perceived positively. The paired comparison data revealed that the students preferred Statement 12 (Let's see how many of you can get them all correct.) not only in comparison with other presumably neutral statements, but also in comparison with several presumably positive statements. Furthermore, many students mentioned a teacher challenge in their free responses to the question about things that teachers could do to motivate them to work hard, and very few negative comments were made about such challenge statements. The negative correlations seen in the earlier study remain unexplained.

Inspection of the challenge statements made by the teachers in whose classrooms we observed these negative correlations suggests that these teachers tended to throw out such challenges in demanding and somewhat negative

ways (e.g., "You should be able to do these problems correctly by now, unless you work carelessly."). These and other informal observations from the previous study suggest that the tone and manner with which teachers make task presentation statements may be at least as important as the content of those statements in determining students' motivational responses.

Finally, the Kher study introduces some anomalies of its own. In particular, it is not clear why students respond positively to information suggesting that the task teaches skills that are important for future school success, and yet do not respond very positively to statements indicating that the task teaches skills that are important for success in life outside of school. Most adults would probably expect students to respond at least as positively to the latter statements as to the former. The youngest students interviewed in the Kher study were the least responsive to statements about the value of skills for coping with life outside of school. Perhaps the applications that we mentioned (grocery shopping, banking) were too removed from their present life concerns to be very meaningful to them. Whatever the reasons, we were surprised to find that statements linking school tasks to life outside of school did not produce more positive student response. Looked at from another point of view, these findings are yet another indication of the degree to which students tend to be preoccupied with success and failure issues and with the exchange of performance for grades, to the point that concern about what they are learning is clearly secondary.

In responding to the Kher data, it is important to bear in mind that they are based on self report rather than observed behavior. As noted above, we have reason to question the validity of many of the responses to the paired comparison items. Furthermore, even the data based on responses to the two open-ended questions should be considered tentative pending verification in

actual classroom settings. The students' responses to our interview questions may not accurately describe their responses to teachers' actual introductions of classroom tasks.

Socializing Student Motivation to Learn

Our data and those of others (Doyle, 1983; Harter, 1981; Lepper, 1983) all suggest that there is little evidence of student motivation to learn in the typical classroom. Apparently, students start school with enthusiasm but gradually settle into a dull routine in which interest centers on being able to meet demands. The students become attuned to and appreciative of information that clarifies and helps them to meet these demands successfully, but they do not appear to develop enthusiasm for the knowledge or skills being taught or for their applications outside school.

In theory, teachers should be able to develop motivation to learn in their students by socializing the students' beliefs, attitudes, and expectations concerning academic activities, as well as the information-processing and problem-solving strategies the students use when engaged in those activities. However, it appears that very little such socialization occurs, and what does occur seems too half-hearted or otherwise lacking in credibility (from an adult perspective, at least) to be very effective.

Recall that none of the six teachers studied by Brophy et al. (1983) ever made reference to the fact that students could derive personal satisfaction from developing their knowledge or skills and that, in general, positive task introductions were infrequent except for the statement that the work would be easy. The following examples that we observed came the closest to approaching the kinds of teacher socialization that we would like to see more of in the typical classroom.

--These are not elementary, high school, or college level words; these are living level words. You'll use them everyday in life. If you plan to be a writer or enjoy reading, you will need these words.

--Remember: The essential thing is to do them correctly, not to be the first to finish.

--I think you will like this book. Someone picked it out for me, and it's really good.

--This is a really strange story. It's written in the first person, so that the person talking is the one who wrote the story about his experience. It has some pretty interesting words in it. They are on the board.

--The stories in this book are more interesting than the ones in the earlier level books. They are more challenging because the stories and vocabulary are more difficult. Reading improves with practice, just like basketball. If you never shoot baskets except when you are in the game, you are not going to be very good. Same with reading. You can't do without it.

--Answer the comprehension questions with complete sentences. All these stories are very interesting. You'll enjoy them.

--You girls should like this story because it is a feminist story. You boys will enjoy yours too. Your story is especially interesting. I want you to be sure to read it. It's a mystery, and you'll enjoy it.

--Percent is very important. Banks use it for interest loans, and so on. So it is important that you pay attention.

--You're going to need to know fractions for math next year. You will need fractions in the world to come.

At least three things should be noted about these examples. First, these are the best examples we could find in data representing about 100 hours of classroom observation. Second, notice how minimal and essentially barren most of these remarks are. They do not go into enough detail to be very meaningful or memorable for most students, and many of them have a perfunctory, go-through-the-motions-without-much enthusiasm-or-conviction quality to them. Third, whatever positive effect these remarks may have had was probably undercut by the facts that (1) most of the teachers' remarks to the students concerned procedural demands and evaluations of work quality or progress

rather than description of the task itself or what the students might get out of it and (2) many of the rest included remarks such as the following.

--Today's lesson is nothing new if you've been here.

--If you get done by 10 o'clock, you can go outside.

--Your scores will tell me whether we need to stay with multiplication for another week. If you are talking, I will deduct 10 points from your scores.

--This penmanship assignment means that sometimes in life you just can't do what you want to do. The next time you have to do something you don't want to do, just think "Well, that's just part of life."

--Get your nose in the book, otherwise I'll give you a writing assignment.

--You don't expect me to give you baby work every day, do you?

--You've been working real hard today, so let's stop early.

--You'll have to work real quietly, otherwise you'll have to do more assignments.

--My talkers are going to get a third page to do during lunch.

--We don't have a huge amount to do, but it will be time consuming.

--This test is to see who the really smart ones are.

If the teachers we have been studying are typical, and we have reason to believe that as a group they are, if anything, better than average, then it appears that there will continue to be little evidence of student motivation to learn in the typical classroom until teachers are trained to socialize such motivation in their students. Furthermore, it appears that nothing short of a high-powered, systematic teacher-training effort is likely to succeed. The next step in our program of research is to develop such an effort. Undoubtedly, it will have to include elements designed to change teachers' attitudes, beliefs, and expectations in addition to elements designed to train them to perform specific practices. Many teachers presently believe that it is not realistic to expect students to develop motivation to learn in classrooms, and

most of the rest appear to act as if they hold this belief even if they have never consciously articulated it. Part of our effort, therefore, will be to persuade teachers to believe that the development of student motivation to learn through socialization is a realistic goal, or at least to suspend disbelief and commit themselves to this goal for the duration of the experiment.

Assuming such commitment, it will then be necessary to work with the teachers to create conditions favorable to the development of student motivation to learn and to train them in techniques designed to foster such motivation. Some of our effort will be directed toward setting the stage by eliminating undesirable elements and creating desirable conditions: insuring an adequate match between the demands of academic activities and the abilities of students, encouraging students to ask questions and learn from their mistakes, minimizing the salience of the teacher's authority-figure role and of testing and grading, and using praise and rewards (if at all) according to the guidelines summarized in Table 2.

Working within these established conditions, teachers would then be trained to socialize motivation to learn directly through such techniques as the following:

--Modeling attitudes, beliefs, and expectations regarding academic activities that illustrate motivation to learn.

--Modeling, with overt verbalization of associated self talk, the processes involved in engagement in academic activities.

--Direct instruction in relevant information-processing, problem-solving, metacognitive-awareness, and self-monitoring skills.

--Establishing optimal learning sets for academic activities through task introductions that stress their purposes and intended outcomes.

--Focusing attention on these knowledge and skill outcomes through the kinds of questions asked and the kinds of feedback given to the students.

This brief list is being expanded and elaborated during pilot activities underway at present. Our plan is to develop a training program that is

systematic and powerful enough to make important changes in teacher behaviors believed to affect student motivation to learn, and yet assimilable within traditional approaches to classroom teaching. If our training program is successful, we will be in a position to find out whether student motivation to learn can be stimulated through teacher socialization and can coexist with the grading system, the prescribed curriculum, and all of the other features of the classroom as a work place. We hope that such teacher socialization behavior can succeed, not only in stimulating student motivation to learn particular content, but ultimately in developing motivation to learn as a personal trait or predisposition that students would begin to generate spontaneously as they engage in all kinds of activities, in or out of the classroom, voluntary or involuntary.

There will be realistic limits on how far such effects can carry, of course. For one thing, even those who are most generally motivated to learn cannot learn everything, so that individuals' preferences for certain topics or tasks over others can be expected to develop, and these will deepen over time. So will their actual and perceived differences in aptitudes for various tasks. Also, many of the tasks that students are asked to do seem pointless or unnecessarily boring, so that in these cases, finding better tasks is a more sensible response to low motivation than attempting to stimulate interest in such tasks. Nevertheless, it remains true that even otherwise optimal schooling will remain primarily a work setting in which students are required to engage in externally imposed tasks. They can either fight this situation all the way, making things miserable for themselves and their teachers, or else make the best of it by trying to enjoy it and get as much out of it as they can. The research program described here is designed to identify strategies that teachers can use to encourage students to follow the latter course.

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